UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

5514 7590 09/04/2009 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA

NEW YORK, NY 10112

EXAMINER

JOO, JOSHUA

ART UNIT PAPER NUMBER

2454

DATE MAILED: 09/04/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/536 974	05/27/2005	Macabiro Odnira	00962 109900	9204	

TITLE OF INVENTION: DATA PROCESSING APPARATUS AND DATA PROCESSING METHOD, AND COMPUTER PROGRAM

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 12/04/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off tions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a	TE FEE and PUBLICAT ders and notification of a specifying a new corre					
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Not Fee pap bay	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
FITZPATRICK 30 ROCKEFELI NEW YORK, N			SCINTO	T be	Cer	tificate	e of Mailing or Trans s) Transmittal is being ficient postage for fire ISSUE FEE address I) 273-2885, on the d	mission	with the United
									(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIR	MATION NO.
10/536,874	05/27/2005			Masahiro Odaira		00862.108809. 8304			
				TA PROCESSING METE					
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU				ATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	1	2/04/2009
EXAM	EXAMINER		ART UNIT	CLASS-SUBCLASS					
JOO, JO	JOO, JOSHUA		2454	709-246000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	nge of "Indicated, Use	Correspondence ation form e of a Customer	2. For printing on the p (1) the names of up to co agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atteitsted, no name will be THE PATENT (print or ty data will appear on the p I a substitute for filing an	o 3 registered pater vely, le firm (having as a agent) and the nam meys or agents. If printed. pe)	memb es of u no nan	p to p to see is 3 dentified below, the d		as been filed for
(A) NAME OF ASSIC	iate assignee category or	catego		• •	Individual 🗆 C	orporati	ion or other private gro		_
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				Department of Fee(s): (Please) A check is enclosed. Payment by credit car The Director is hereby overpayment, to Department.	rd. Form PTO-2038	is atta	sched. required fee(s), any de	ficiency, o	
	s SMALL ENTITY state	ıs. See	37 CFR 1.27.	b. Applicant is no lon					
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) v ites Pat	will not be accepted ent and Trademark	from anyone other than to Office.	the applicant; a reg	istered .	attorney or agent; or th	ne assignee	or other party in
Authorized Signature					Date				
Typed or printed name				Registration No					
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	U.S.C. U.S.C. USPT rden, sl O NOT	11. The information 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O.	on is required to obtain or 1.14. This collection is es depending upon the indi- e Chief Information Offic COMPLETED FORMS T	retain a benefit by timated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	the pub minuter omment Trader S. SEN	lic which is to file (and is to complete, including its on the amount of times ark Office, U.S. Dep D TO: Commissioner	by the US g gathering me you req artment of for Patents	PTO to process) §, preparing, and uire to complete Commerce, P.O. P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 09/04/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/536,874	05/27/2005	Masahiro Odaira	00862.108809.	8304		
5514 75	90 09/04/2009		EXAMINER			
FITZPATRICK (CELLA HARPER &	JOO, JOSHUA				
30 ROCKEFELLER PLAZA			ART UNIT	PAPER NUMBER		
NEW YORK, NY	10112		2454			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 717 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 717 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/536 874 ODAIRA ET AL. Notice of Allowability Examiner Art Unit JOSHUA JOO 2454 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 7/22/09. 2. The allowed claim(s) is/are 20-23. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). Examiner's Amendment/Comment Paper No./Mail Date 7/22/09 8. T Examiner's Statement of Reasons for Allowance ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material Other . /Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given by Applicant Michael J. Guzniczak, Reg. No. 59,820, on August 17, 2009.

The application is amended as follows:

Claims

20. (Currently Amended) A data processing apparatus for output-processing image data for respective pages, comprising:

a memory for storing page management records and page data;

a page data management unit constructed to perform a management process for each of respective pages scanned by an image reader, wherein the management process comprises:

creating a page management record <u>for each of the respective pages</u> and storing the page management record in the memory, wherein the page management record corresponds to <u>the a</u> respective page scanned by the image reader,

generating a first type of page data and a second type of page data and storing the first and second types of page data in the memory, wherein the first type of page data includes RAW image data representing the respective page and the second type of page data includes image data generated by encoding the RAW image data included in the first type of page data,

writing a memory address of the first type of page data and a memory address of the second type of page data to the page management record for the respective page,

Application/Control Number: 10/536,874

Art Unit: 2454

managing respective output processes by a first output unit and a second output unit referring to the created page management record to process the first type of page data or the second type of page data, and

maintaining on the page management record, a link count that counts a number of output units that refer to the page management record and a flag that indicates whether reference to the page management record by output units is complete.

deleting the first type of page data from the page management record in response to <u>determining</u>
that the link count is zero for the first type of page data and in response to the flag indicating completion
of the reference by both the first and second output units to the first type of page data, and

a control unit constructed to perform a control process for each of said respective pages scanned by the image reader, wherein the control process comprises:

monitoring completion of storing the first type of page data scanned by the image reader in the memory,

encoding the RAW image data included in the first type of page data in response to the completion of storing, and

determining whether or not image data resulting from encoding the RAW image data exists,

wherein if the resultant image data does not exist, the control unit controls the first output unit to

output the RAW image data,

wherein if the resultant image data does exist, the control unit decodes the resultant image data into RAW image data, and controls the first output unit to output the decoded RAW image data, and wherein if the second output unit is not referring to the RAW image data of which the first output unit completes an output, the control unit deletes the RAW image data of which the first output unit completes the output.

Application/Control Number: 10/536,874

Art Unit: 2454

 (Currently Amended) A data processing method for output-processing image data for respective pages, comprising:

a page data management step performed for each of respective pages scanned by an image reader, wherein the page data management step includes at least the steps of:

creating a page management record for each of the respective pages and storing the page management record in a memory, wherein the page management record corresponds to the <u>a</u> respective page scanned by the image reader,

generating a first type of page data and a second type of page data and storing the first and second types of page data in the memory, wherein the first type of page data includes RAW image data representing the respective page and the second type of page data includes image data generated by encoding the RAW image data included in the first type of page data,

writing a memory address of the first type of page data and a memory address of the second type of page data to the page management record for the respective page,

managing respective output processes by a first output step and a second output step referring to the created page management record to process the first type of page data or the second type of page data.

maintaining on the page management record, a link count that counts a number of output units that refer to the page management record and a flag that indicates whether reference to the page management record by output units is complete.

deleting the first type of page data from the page management record in response to <u>determining</u> that the link count is zero for the first type of page data and in response to the flag indicating completion of the references by both the first and second output steps to the first type of page data, and

a control step performed for each of the respective pages scanned by the image reader, wherein the control step includes at least the steps of: Art Unit: 2454

monitoring completion of storing the first type of page data in the data memory,

encoding the RAW image data included in the first type of page data in response to the

completion of storing, and

determining whether or not image data resulting from encoding the RAW image data exists,

wherein if the resultant image data does not exist, the control step controls the first output step to

output the RAW image data,

wherein if the resultant image does exist, the control step decodes the resultant image data into

RAW image data, and controls the first output step to output the decoded RAW image data, and

wherein if the second output step is not referring to the RAW image data of which the first output

step completes an output, the control step deletes the RAW image data of which the first output step

completes the output.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Joshua Joo who telephone number is 571 272-3966. If attempts to reach the examiner by

telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915.

/I I/

Examiner, Art Unit 2454

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454